| FORM PTO 1449 (modified) | | | ATTY DOCKET NO. 02910.000110. | APPLICATION NO. 10/764,538 | | | | | |
|---|---|------------|----------------------------------|-------------------------------|----------|--|--|--|--|
| U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE PE LIST OF REFERENCES CITED BY APPLICANT(S) | | | APPLICANT Kazunari Oyama et al. | | | | | | |
| (Use several sheets if necessary) JAN 1 2 2005 | | | January 27, 2004 | GROUP N.Y.A. | | Y.A. | | | |
| | | \2 | U.S. PATENT DOCUMENTS | | | | | | |
| EXAMINER INITIAL | DOCUMENT NUMBER | DATE TRADE | NAME | CLASS | SUBCLASS | FILING DATE | | | |
| Kc | 2003/0048057 A1 | 03/13/03 | Oyama et al. | 313 | 311 | | | | |
| لاد | 2002/0009637 A1 | 01/24/02 | Murakami et al. | 429 | 213 | | | | |
| KC | 5,847,495 | 12/08/98 | Yamanobe et al. | 313 | 310 | | | | |
| K.C | 2002/0132041 A1 | 09/19/02 | Yamanobe et al. | 427 | 77 | | | | |
| K(| 6,246,168 B1 | 06/12/01 | Kishi et al. | 313 | 495 | | | | |
| kc | 6,179,678 B1 | 01/30/01 | Kishi et al. | 445 | 24 | | | | |
| KC | 6,147,449 | 11/14/00 | lwasaki et al. | 313 | 495 | | | | |
| KC | 6,171,162 B1 | 01/09/01 | lwasaki et al. | 445 | 6 | | | | |
| kc | 5,588,893 | 12/31/96 | Kaftanov et al. | 445 | 6 | | | | |
| | FOREIGN PATENT DOCUMENTS | | | | | | | | |
| | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION YES/NO/ OR ABSTRACT | | | |
| kc | 2000-95509 | 04/04/00 | Japan | C01B | 31/02 | Abst. & Counterpart U.S. Patent 6,455,021 | | | |
| KC | 1 291 889 A2 | 03/12/03 | ЕРО | H01J | 1/304 | English | | | |
| KC | 0 913 508 A2 | 05/06/99 | ЕРО | D01F | 9/127 | English | | | |
| KC | 1 187 161 A2 | 03/13/02 | ЕРО | H01J | 3/02 | English | | | |
| KC | 1 245 704 A2 | 10/02/02 | EPO | D01F | 9/127 | English | | | |
| Ke | WO 01/95360 | 12/13/01 | PCT | | | English | | | |
| OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.) | | | | | | | | | |
| kc | C.A. Spindt et al., <i>Physical Properties of Thin-Film Field Emission Cathodes with Molybdenum Cones</i> , Journal of Applied Physics, Vol. 47, No. 12, pp. 5248-5263 (1976) | | | | | | | | |
| KC | S. lijima, Helical Microtubules of Graphitic Carbon, Nature, Vol. 354, pp. 56-58 (1991) | | | | | | | | |
| EXAMINER | least (| 2 < | DATE CONSIDERED 10/8/ | é C | | | | | |

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

| U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE LIST OF REFERENCES CITED BY APPLICANTS) (Use several sheets if necessary) | | | ATTY DOCKET NO. 02910.000110. | APPLICATION NO. 10/764,538 | | | | |
|---|--|----------|----------------------------------|-------------------------------|----------|---------------------------------------|--|--|
| | | | APPLICANT Kazunari Oyama et al. | | | | | |
| | | | FILING DATE January 27, 2004 | GROUP N.Y.A | | Y.A | | |
| | | .9. | U.S. PATENT DOCUMENTS | | | | | |
| 'EXAMINER INITIAL | DOCUMENT NUMBER | THA PINE | NAME | CLASS | SUBCLASS | FILING DATE | | |
| kc | 5,986,389 | 11/16/99 | Tsukamoto | 313 | 310 | | | |
| KC | 6,231,413 B1 | 05/15/01 | Tsukamoto | 445 | 24 | | | |
| KC | 6,184,610 B1 | 02/06/01 | Shibata et al. | 313 | 309 | | | |
| KC | 6,472,814 B1 | 10/29/02 | Yamanobe et al. | 313 | 495 | | | |
| KC | 6,288,494 B1 | 09/11/01 | Tsukamoto et al. | 315 | 169.1 | | | |
| kc | 2002/0057045 A1 | 05/16/02 | Tsukamoto | 313 | 309 | | | |
| kc | 2002/0074947 A1 | 06/20/02 | Tsukamoto | 315 | 169.3 | | | |
| KC | 2002/0060516 A1 | 05/23/02 | Kawate et al. | 313 | 495 | | | |
| kc | 2002/0031972 A1 | 03/14/02 | Kitamura et al. | 445 | 3 | | | |
| ke | 2003/0006684 A1 | 01/09/03 | Kawate et al. | 313 | 311 | | | |
| FOREIGN PATENT DOCUMENTS | | | | | | | | |
| | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION YES/NO/ OR ABSTRACT | | |
| kc | 1 291 891 A2 | 03/12/03 | EPO | H01J | 3/02 | English | | |
| kc | 1 122 344 A2 | 08/08/01 | EPO | D01F | 9/127 | English | | |
| KC | 0 809 854 | 11/08/00 | EPO | _ | _ | English | | |
| kc | 2003-536215 | 12/02/03 | Japan | | | Abstract | | |
| OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.) | | | | | | | | |
| KC | Nikkei Mechanical, No. 567, pp.36-57 (2001) | | | | | | | |
| kc | V. Semet et al., Field Electron Emission from Individual Carbon Nanotubes of a Vertically Aligned Array, Applied Physics Letters, Vol. 81, No. 2, pp. 343-345 (2002) | | | | | | | |
| K.c | P. Collins et al., <i>Unique Characteristics of Cold Cathode Carbon-Nanotube-Matrix Field Emitters</i> , Physical Review B, Vol.55, No. 15, pp. 9391-9399 (1997) | | | | | | | |
| EXAMINER LA CASIDERED 10/8/05 | | | | | | | | |

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

| FORM PTO 1449 (modified) | | | ATTY DOCKET NO. 02910.000110. | APPLICATION NO. 10/764,538 | | | |
|---|---|----------------------------------|--|-------------------------------|------------|-------------|--|
| U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE PE | | | APPLICANT | APPLICANT | | | |
| LIST | OF REFERENCES CITED BY A (Use several sheets if necess | PPL CANT(S) | Kazunari Oya | | | | |
| | | JAN 1 2 2 | January 27, 2004 | G | SROUP N.) | Y.A. | |
| TAM 1 2 200 F JAMUARY 27, 2004 N.Y.A. SEXAMINER INITIAL NUMBER DATE NAME CLASS SUBCLASS IF APPROPRIATE | | | | | | | |
| EXAMINER INITIAL | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE | |
| Κc | 2003/0057860 A1 | 03/27/03 | Tsukamoto | 315 | 169.3 | | |
| KC | 2003/0048055 A1 | 03/13/03 | lshikura et al. | 313 | 311 | | |
| Кc | 2003/0162464 A1 | 08/28/03 | Kyogaku et al. | 445 | 24 | | |
| KC | 4,904,895 | 02/27/90 | Tsukamoto et al. | 313 | 336 | | |
| kc | 6,515,640 B2 | 02/04/03 | Tsukamoto et al. | 345 | 75.2 | | |
| kc | 6,626,719 B2 | 09/30/03 | Ono et al. | 445 | 24 | | |
| KC | 2003/0048056 A1 | 03/13/03 | Kitamura et al. | 313 | 311 | | |
| KC | 2003/0124944 A1 | 07/03/03 | Kyogaku et al. | 445 | 6 | | |
| KC | 2003/0048057 A1 | 03/13/03 | Oyama et al. | 313 | 311 | , | |
| Kc. | 2002/0047513 A1 | 04/25/02 | Nomura | 313 | 495 | | |
| kc | 6,628,053 B1 | 09/30/03 | Den et al | 313 | 310 | | |
| kc | 6,645,028 B1 | 11/11/03 | Dean et al. | 445 | 6 | | |
| kc | 5,973,446 | 10/26/99 | Kaftanov et al. | 313 | 309 | | |
| KC | 5,872,422 | 02/16/99 | Xu et al. | 313 | 311 | | |
| kc | 5,773,921 | 06/30/98 | Keesmann et al. | 313 | 309 | | |
| Kc | 6,455,021 B1 | 09/24/02 | Saito | 423 | 447.3 | | |
| kc | 5,973,444 | 10/26/99 | Xu et al. | 313 | 309 | | |
| OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.) | | | | | | | |
| KC | X. Xu et al., A Meth Applied Physics Le | od for Fabric etters, Vol. 74 | cating Large-Area, Patterned, Carbon Na J, No. 17, pp. 2549-2551 (1999) | inotube l | Field Emit | ters" | |
| kc | Y. C. Choi et al., Controlling the Diameter, Growth Rate, and Density of Vertically Aligned Carbon Nanotubes Synthesized by Microwave Plasma-Enhanced Chemical Vapor Deposition", Applied Physics Letters, Vol. 76, No. 17, pp.2367-2369 (2000) | | | | | | |
| EXAMINER | Kex C | | DATE CONSIDERED 10/8/05 | | | | |

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

| FORM PTO 1449 (modified) U.S. DEPARTMENT OF COMMERCE | | | ATTY DOCKET NO. 02910.000110. | APPLICATION NO. 10/764,538 | | 38 |
|--|------------------------------|-------------------|---------------------------------|-------------------------------|----------|---------------------------------------|
| PATENT AND TRADEMARK OFFICE | | | APPLICANT Kazunari Ovama et al | | | |
| | (Use several sheets if neces | JAN 1 2 2000 | FILING DATE January 27, 2004 | | ROUP | r.A. |
| | | 2000 3 | S.S. PATENT DOCUMENTS | | | |
| *EXAMINER INITIAL | DOCUMENT NUMBER | THE THAT PARTY OF | NAME | CLASS | SUBCLASS | FILING DATE |
| لاد | 2004-0060477 | 4/04 | lwaki et al. | 106 | 472 | |
| kc | 2004-0063839 | 4/04 | Kawate et al. | 524 | 439 | |
| k< | 2004-0155567 | 8/04 | Kyogaku et al. | 313 | 310 | |
| kc | 2004-0183422 | 9/04 | Kuroda et al. | 313 | 310 | |
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| OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.) | | | | | | |
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.